Revised January 2008
Chesapeake Bay Program
Point Source and Nonpoint Source
Data Submission Specifications and Requirements

The Tributary Strategy and Point Source Workgroups of the Nutrient Subcommittee coordinate with the Chesapeake Bay Program's Modeling and Communications Subcommittees and Implementation Committee to establish data submission **requirements** that meet the communications and management needs of the Chesapeake Bay Program. Implementation Grant or Work Plan deliverables must include schedules for submission of point source and nonpoint source nutrient reduction activities for use in Chesapeake Bay Watershed Model annual nutrient and sediment load reduction estimation scenarios. The following point source and nonpoint source data submission requirements were developed by the Nutrient Subcommittee's Point Source and Tributary Strategy workgroups, respectively, to meet Chesapeake Bay Program Phase 5 watershed model requirements. With the exception of the EPA required date**s** for reporting stated **on** page 3 **of this Attachment**, the following information reflects both workgroups' latest agreements and minimum data requirements.

Jurisdictions are required to submit **quality assured data** by the established due date**s**. If necessary, base implementation grant funds should be used by the jurisdiction to ensure compliance with the due date**s and data quality requirements**. Recipients are to follow the deliverable requirements stated in the General Guidance portion of this document.

POINT SOURCE DATA SUBMISSION

Facility Requirements:

Jurisdictions will submit point source data for all significant dischargers within their portions of the Chesapeake Bay watershed. A significant discharger is a facility that meets <u>one</u> of the following criteria:

- In West Virginia, Delaware and New York - Facility treating domestic wastewater and the design flow is greater than or equal to 0.4 million gallons per day (MGD).
- In Pennsylvania - Facility treating domestic wastewater and discharging greater than or equal to 0.4 MGD.
- In Maryland - Facility treating domestic wastewater and the design flow is greater than or equal to 0.5 MGD.
- In Virginia - Facility treating domestic wastewater and the existing design flow is greater than or equal to 0.5 MGD west of the fall line or 0.1 MGD east of the fall line.
- If adopted, the draft point source permitting regulations in Virginia would redefine all new facilities greater than 40,000 gallons per day (GPD) or facilities expanding by greater than 40,000 GPD as significant.
- Industrial facilities with a nutrient load equivalent to 3,800 total phosphorus (TP) lbs./year or 27,000 total nitrogen (TN) lbs/year.

- Any other municipal and industrial facilities identified within a jurisdictional tributary strategy.

Jurisdictions are encouraged, but not required, to track "non-significant" facilities not meeting the above definition and provide their flow and concentration data on an annual basis to EPA CBPO. For the purpose of consistency, jurisdictions are strongly encouraged to include flow and concentrations for all facilities with a design flow greater than 0.40 MGD.

Data Requirements:

Jurisdictions are required to submit monthly concentration and flow data for all parameters listed below for each significant discharger facilities within their portion of the Chesapeake Bay watershed. The QAQC procedures listed in Figure 1 should be performed prior to data submission.

At Facility Level: Data must be provided for those municipal, industrial, and federal facilities as defined above as "significant dischargers" of total nitrogen and total phosphorus to the Bay watershed. The jurisdictions must annually update their list of significant dischargers with additional facilities that meet one of the criteria of the significant facility definition. The location (county, latitude/longitude) of each facility's discharge point must be reported.

At the Monthly Level: concentration and flow data for the 9 identified parameters must be provided for each outfall. Jurisdictions will submit all parameters in each month's data record for each facility. Data for the following parameters will be submitted: average monthly flows and average monthly concentrations of NH3, TKN, NO23 (or NO2+NO3), TN, PO4, TP, CBOD (preferably) or BOD, and DO. All nitrogen species need to be reported as nitrogen; all phosphorus species need to be reported as phosphorus.

In the absence of monthly monitored concentration data for one or more of the above listed 9 parameters for a facility, the jurisdiction will submit the Point Source Workgroup agreed to default concentration data or calculated data based on the species relationship listed in Table 1. All default or calculated data need to be flagged with brief information.

Industrial facility data should be reported as average monthly flow and net concentrations for that respective month, as quantified.

Each jurisdiction **must** review all point source data for accuracy and outliers prior to submission to EPA CBPO. **The required** quality assurance and quality control **procedures** are listed in Figure 1.

NONPOINT SOURCE DATA SUBMISSION

Each jurisdiction provides progress data in a format unique to that jurisdiction. The Chesapeake Bay Program has worked with each jurisdiction to develop suitable

translation mechanisms to convert jurisdiction data into Chesapeake Bay Watershed Model input format. A jurisdiction may not change an existing format, unless approval has been received in advance from the Project Officer. Only changes that move an existing format closer to a Chesapeake Bay Watershed Model standard will be considered and approved.

Nonpoint source BMP information is used to create annual progress scenarios using the CBP Watershed Model (WSM) **and measures of restoration efforts**. The information submitted must conform to criteria and agreed-to format established by the Tributary Strategy Workgroup. All BMPs will be submitted on a cumulative basis by county-segment. At a minimum, the following information is required for each BMP: BMP name, county- segment, amount and units of measure. Animal waste systems require additional information: animal type and animal units or numbers affected. BMP credits for septic connections must identify the WSM segment and POTW for which the connections are made.

Data should be submitted in Microsoft Excel or Access v97 or above. ASCII (tab delimited) is accepted with prior approval from the Project Officer and stated in the Work Plan. Each report must include complete documentation, field names (column headings), and definitions were appropriate. Nutrient reduction activities that are new or not currently modeled will not be credited in the model until the BMPs, their definitions and pollutant removal efficiencies have been approved using the Tributary Strategy Workgroup New BMP Protocol.

POINT SOURCE AND NONPOINT SOURCE REPORTING FREQUENCY

Progress reports are a deliverable of the grant. Each jurisdiction **must check** all data for accuracy and outliers prior to submission to the Chesapeake Bay Program Office. Grant recipients must provide progress data for significant point sources and nonpoint source BMPs **according to the following schedule:**

December 31, 2008: July 1, 2007 – June 30, 2008 data

This schedule may not apply to the Commonwealth of Virginia which may submit its data in accordance with the Nutrient Allocation Compliance and Reporting requirements under Section 62.1-44.19:18 of the Virginia Code.

Figure 1: Point Source Nutrient Data Processing Flow Diagram

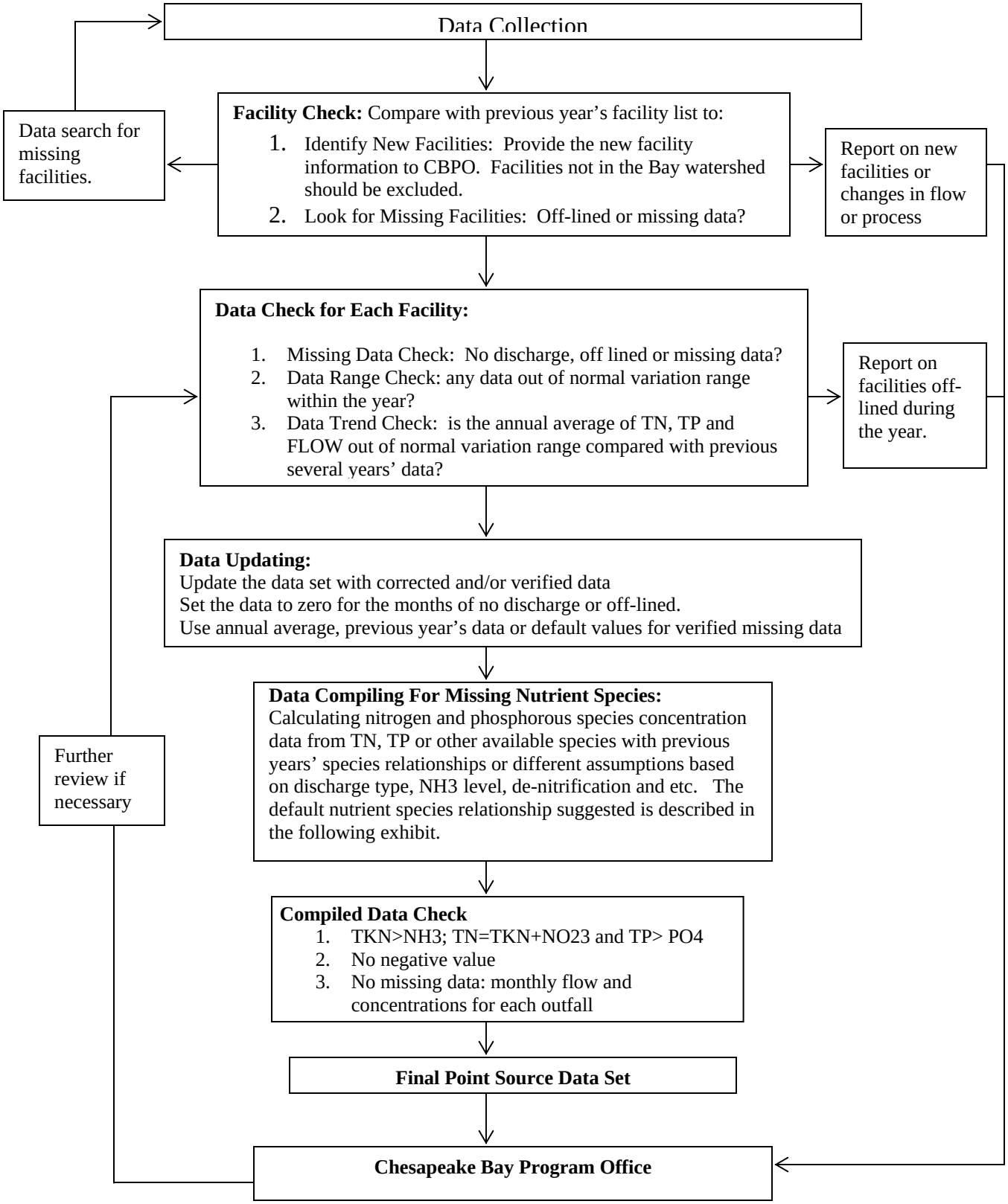

Table 1: Species Relationship

Type of Point Source		NH3/NO3/OrgN (w/o Nitrification)	NH3/NO3/OrgN (w/ Nitrification)++	NH3/NO3/OrgN (w/Denitrification)
Municipalities (phase IV)		80/5/15(1)	7/85/8	12/73/15
Municipalities (proposed for phase V by DEQ)		80/3/17**	7/80/13**	12/73/15(2)
Industries	Chemical	7/85/8+		
	Pulp & Paper	1/0/99**		
	Poultry Facilities w/BNR			8/75/17**
	Nonchemical (includes seafood, poultry, & food processors w/out BNR)	80/3/17**	7/85/8+	/75/17**

(1) Stearns and Wheler recommended 80/0/20; however, the PSWG felt that there would often be minimal (5%) NOx present.

(2) Unchanged from the ratio recommended by Stearns and Wheler in Phase IV.

++Apply this relationship wherever NH3 limits apply

+Assumed by performing an analysis of MD chemical industry wastewater effluents which showed it is very close to the relationship for nitrifying sewage. This would apply to all chemical discharges and assumes that wastewaters are treated chemically and thus would not vary as for sewage relationships

** Updated, as based on an analysis of actual data from plants operating in Virginia.

Type of Point Source	Facilities w/out TP Control OP/TP ratio	Facilities With TP Control OP/TP Ratio
All	71/29[a]	67/33[a]

[a] determined by averaging the actual data from MD and VA plants (including Blue Plains for "with TP Reduction".

Facility with TP Control is defined as a facility having a permit limit for total phosphorus.

Period	TSS Default (All jurisdictions)	TSS Default w/out NRT	TSS Default w/ NRT
1985-1990[b]	45		
1990-2000	25		
2000-2010		15	8

Type of Point Source	DO concentration 1985-1990	DO Concentration 1990-2010
All	4.5 mg/l (b)	5.0 mg/l

(b) takes into account a number of NMP facilities operating across the watershed.